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EXAMINER	
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ART UNIT	PAPER NUMBER
2164	

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12/12/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/845,571	SCHABES ET AL.	
	Examiner	Art Unit	
	MELLISSA M. CHOJNACKI	2164	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 September 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5 and 32-46* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5 and 32-46* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Remarks

1. In response to communications filed on September 25, 2008, claims 1, 3-4, 35, 37-46 have been amended, no new claims have been cancelled or added. Therefore, claims 1-5 and 32-46 are presently pending in this application.

Claim Objections

2. Claims 4 and 40 are objected to because of the following informalities:

Claims 4 and 40, recite the limitation "their", which renders the claim vague and indefinite, because it is unclear as to what "their" signifies in the claims.

. Appropriate correction is required.

Claims 1-36 are objected to for not being tied to a particular machine or transformation.

Specification Objections

The Specification is objected to for not describing a "computer readable medium" as stated in claims 1-36.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 3-11, 14 and 29-31 are rejected under 35 U.S.C. 102(e) as being anticipated by Brown et al. (U.S. Patent No. 6,665,666).

As to claim 1, Brown et al. teaches a method of providing an answer to a question based on information stored on a computer readable medium (See abstract; column 1, lines 22-27) comprising the steps of

parsing the question into a series of syntactic categories (See column 3, lines 47-60);

generating an analyzed question comprising the syntactic categories of the parsed question (See column 3, lines 48-67; column 4, lines 1-14; column 5, lines 7-10; column 11, lines 61-65);

identifying one or more predetermined question patterns within the analyzed question (See column 2, lines 39-43; column 3, lines 48-67; column 4, lines 1-14);

transforming the one or more identified question patterns into one or more partially unspecified statements the transforming including matching each of the

identified question patterns to a set of predetermined transformations corresponding to the one or more partially unspecified statements (See column 3, lines 56-66, where "predetermined transformations" is read on "templates"), wherein each of the partially unspecified statements is missing a portion corresponding to an answer and the predetermined transformations describe syntactic variations of one or more terms included in the question (See column 1, lines 37-57; column 14, lines 3-48);

generating partially unspecified queries corresponding to the partially unspecified statements (See column 3, lines 56-66); and

determining one or more answers by matching the partially unspecified queries to stored information (See abstract; column 3, lines 38-67; column 4, lines 1-13).

As to claims 2 and 38, Brown et al., teaches transforming matched question patterns into one or more partially unspecified statements using syntactic frames (See Brown et al., column 1, lines 37-57; column 14, lines 3-48).

As to claims 3 and 39, Brown et al., teaches collecting one or more answers from matching the partially unspecified queries across a plurality of documents in the stored information (See Brown et al., abstract; column 3, lines 48-60).

As to claims 4 and 40, Brown et al. teaches ranking the one or more answers according to their frequency of matching (See Brown et al., column 9, lines 4-10; column 13, lines 11-17).

As to claims 5 and 41, Brown et al. teaches wherein the stored information comprises a set of documents and an index identifying which documents within the set of documents contain terms or groups of terms answering the partially unspecified queries (See Brown et al., abstract; column 1, lines 38-52; column 4, lines 50-53; column 5, lines 33-35, lines 50-57).

As to claims 32, 36, 42 and 46, Brown et al. teaches wherein the partially unspecified statements include at least one syntactic or morphological restriction (See Brown et al., column 1, lines 37-57; column 14, lines 3-48).

As to claims 33 and 43, Brown et al. teaches wherein generating the partially unspecified queries further includes: replacing a generic syntactic or morphological category with one or more corresponding elements from the question (See Brown et al., abstract; column 1, lines 37-57; column 14, lines 3-48); wherein the code that generates the partially unspecified queries further includes code that: replaces a generic syntactic or morphological category with one or more corresponding elements from the question (See Brown et al., abstract; column 1, lines 37-57; column 14, lines 3-48).

As to claims 34 and 44, Brown et al., teaches wherein a first of the partially unspecified statements is transformed into more than one partially unspecified queries in accordance with a mapping of a question word to more than one corresponding

partially unspecified term (See Brown et al., column 3, lines 48-60; column 4, lines 1-13; column 9, lines 38-40); wherein a first of the partially unspecified statements is transformed into more than one partially unspecified queries in accordance with a mapping of a question word to more than one corresponding partially unspecified term (See Brown et al., column 3, lines 48-60; column 4, lines 1-13; column 9, lines 38-40).

As to claim 35, Brown et al. teaches a method of providing an answer to a question (See abstract; column 1, lines 22-27) comprising the steps of:

parsing the question into a series of syntactic categories (See column 3, lines 47-60);

generating an analyzed question comprising the syntactic categories of the parsed question (See column 3, lines 48-67; column 4, lines 1-14; column 5, lines 7-10; column 11, lines 61-65);

identifying one or more predetermined question patterns within the analyzed question (See column 2, lines 39-43; column 3, lines 48-67; column 4, lines 1-14);

transforming the one or more identified question patterns into one or more partially unspecified statements the transforming including matching each of the identified question patterns to a set of predetermined transformations corresponding to the one or more partially unspecified statements (See column 3, lines 56-66, where "predetermined transformations" is read on "templates"), wherein each of the partially unspecified statements is missing a portion corresponding to an answer and the predetermined transformations describe syntactic variations of one or more terms included in the question (See column 1, lines 37-57; column 14, lines 3-48);

generating partially unspecified queries corresponding to the partially unspecified statements (See column 3, lines 56-66); and

determining one or more answers by matching the partially unspecified queries to stored information (See abstract; column 3, lines 38-67; column 4, lines 1-13).

As to claim 37, Brown et al. teaches a computer readable medium storing a computer program product for providing an answer to a question comprising code (See abstract; column 1, lines 22-27) that:

computer program code for parsing the question into a series of syntactic categories (See column 3, lines 47-60);

computer program code for generating an analyzed question comprising the syntactic categories of the parsed question (See column 3, lines 48-67; column 4, lines 1-14; column 5, lines 7-10; column 11, lines 61-65);

computer program code for identifying one or more predetermined question patterns within the analyzed question (See column 2, lines 39-43; column 3, lines 48-67; column 4, lines 1-14);

computer program code for transforming the one or more identified question patterns into one or more partially unspecified statements the transforming including matching each of the identified question patterns to a set of predetermined transformations corresponding to the one or more partially unspecified statements (See column 3, lines 56-66, where “predetermined transformations” is read on “templates”), wherein each of the partially unspecified statements is missing a portion corresponding

to an answer and the predetermined transformations describe syntactic variations of one or more terms included in the question (See column 1, lines 37-57; column 14, lines 3-48);

computer program code for generating partially unspecified queries corresponding to the partially unspecified statements (See column 3, lines 56-66); and

computer program code for determining answers by matching the partially unspecified queries to stored information (See abstract; column 3, lines 38-67; column 4, lines 1-13).

As to claim 45, Brown et al. teaches a computer readable medium for providing an answer to a question based on information stored on the computer-readable medium (See abstract; column 1, lines 22-27) comprising code that:

computer program code for parsing the question into a series of syntactic categories (See column 3, lines 47-60);

computer program code for generating an analyzed question comprising the syntactic categories of the parsed question (See column 3, lines 48-67; column 4, lines 1-14; column 5, lines 7-10; column 11, lines 61-65);

computer program code for identifying one or more predetermined question patterns within the analyzed question (See column 2, lines 39-43; column 3, lines 48-67; column 4, lines 1-14);

computer program code for transforming the one or more identified question patterns into one or more partially unspecified statements the transforming including

matching each of the identified question patterns to a set of predetermined transformations corresponding to the one or more partially unspecified statements (See column 3, lines 56-66, where "predetermined transformations" is read on "templates"), wherein each of the partially unspecified statements is missing a portion corresponding to an answer and the predetermined transformations describe syntactic variations of one or more terms included in the question (See column 1, lines 37-57; column 14, lines 3-48);

computer program code for generating partially unspecified queries corresponding to the partially unspecified statements (See column 3, lines 56-66); and

computer program code for determining answers by matching the partially unspecified queries to stored information (See abstract; column 3, lines 38-67; column 4, lines 1-13).

Response to Arguments

5. Applicant's arguments filed on 25-September -2008, with respect to the rejected claims 1-5 and 32-46 have been fully considered but they are not found to be persuasive:

In response to applicants' arguments regarding ***"Brown does not teach parsing the question (query) into a series of syntactic categories. The data representing a QA-token may be characterized as a syntactic category but the remainder of the query is not parsed into a "series" of syntactic categories. Nor does Brown generate an analyzed question comprised of the syntactic categories of the parsed question***, " the arguments have been fully considered but are not found to be

persuasive, because Brown '666 discloses "pattern file" (question patterns), which consist of "question templates" (unspecified statements) and replacing it with the associated set of QA-tokens (Predetermined transformations) (See column 3, lines 48-66). Furthermore, Brown discloses parsing the query into syntactic categories (See column 10, lines 1-25; column 11, lines 60-67; column 12, lines 1-38), where Brown discloses parsing the question into four parts one of which being synonyms, canonical forms etc., which is what the syntactic categories are within the specification of the present application (See paragraph 0039).

In response to applicants' arguments regarding "***Brown essentially stops there and submits the "bag of words" for matching against a body of documents. Thus, it simply does not perform the steps claimed in the present application of: identifying one or more predetermined question patterns within the analyzed question, transforming the one or more identified question patterns into one or more partially unspecified statements ..., or generating partially unspecified queries corresponding to the partially unspecified statements. Lastly, the results or output of Brown is a hit-list of documents while the claimed output of the present application is an answer to the question***," the arguments have been fully considered but are not found to be persuasive, because Brown '666 discloses "pattern file" (question patterns), which consist of "question templates" (unspecified statements) and replacing it with the associated set of QA-tokens (Predetermined transformations) (See column 3, lines 48-66). Furthermore, Brown discloses parsing the query into syntactic categories (See column 10, lines 1-25; column 11, lines 60-67; column 12,

lines 1-38), where Brown discloses parsing the question into four parts one of which being synonyms, canonical forms etc.and transforming the question patterns into "question templates" (unspecified statements) in order to find the answer (See abstract; column 3, lines 48-66; column 10, lines 1-25; column 11, lines 60-67; column 12, lines 1-38). Also, page 5 ,lines 27-29; page 6, lines 1-24 of the present invention specification do not differentiate the "answers" found by the present invention to be any different or unable to read upon Browns "hit-list". According to Brown the "hit-list" contains the "best matches" as does the present invention.

In response to applicants' arguments regarding "***Brown does not generate partially unspecified queries through identifying an appropriate predetermined question pattern and corresponding predetermined statement patterns based only on the syntactic and/or morphological characteristics of the original question and not the specific words of the question,***" the arguments have been fully considered but are not found to be persuasive, because Brown '666 discloses "pattern file" (question patterns and/or synonyms; canonical forms), which consist of "question templates" (unspecified statements) and replacing it with the associated set of QA-tokens (Predetermined transformations) (See column 3, lines 48-66).

In response to applicants' arguments regarding "***Brown '666 does not disclose question analysis that parses, identifies, and assigns syntactic categories to portions of the question, or any use of syntactic categories in the process of creating a query,***" the arguments have been fully considered but are not found to be persuasive, because Brown '666 discloses "pattern file" (question patterns), which

consist of "question templates" (unspecified statements) and replacing it with the associated set of QA-tokens (Predetermined transformations) (See column 3, lines 48-66). Furthermore, Brown discloses parsing the query into syntactic categories (See column 10, lines 1-25; column 11, lines 60-67; column 12, lines 1-38), where Brown discloses parsing the question into four parts one of which being synonyms, canonical forms etc., which is what the syntactic categories are within the specification of the present application (See paragraph 0039).

In response to applicants' arguments regarding "***Brown '666 does not teach or suggest identifying one or more predetermined question patterns within the analyzed question,"*** the arguments have been fully considered but are not found to be persuasive, because Brown '666 discloses "pattern file" (question patterns), which consist of "question templates" (unspecified statements) and replacing it with the associated set of QA-tokens (Predetermined transformations) (See column 3, lines 48-66). Browns predetermined QA-tokens are the predetermined question patterns.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MELLISSA M. CHOJNACKI whose telephone number is (571)272-4076. The examiner can normally be reached on 9:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Rones can be reached on (571) 272-4085. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

December 5, 2008
Mmc

/Charles Rones/
Supervisory Patent Examiner, Art Unit 2164